

REMARKS

Claim 1 is amended in order to more clearly define the claimed invention. It is respectfully submitted that no new matter is entered.

It is believed that this Amendment is fully responsive to the Office Action dated **March 4, 2010**.

In the Final Office Action. Claims 1-17 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Douk (U.S. Published Application 2005/0027236) in view of Noriega et al. (U.S. Published Application 2005/0119615), and Schwager (U.S. Published Application 2001/0007922). Reconsideration and removal of this rejection are respectfully requested in view of the following remarks.

Regarding Claim 1, the Office Action alleges that Douk discloses a guidewire shaft (112) disposed at the distal region of the distal shaft, the guidewire shaft having a guidewire lumen into which a guidewire is insertable, the guidewire lumen being disposed in the guidewire shaft; a hub (120) provided at the proximal end of the proximal shaft, the aspiration lumen extending to the hub.

The Office Action admits that Douk fails to disclose the proper main shaft and a detachable core wire disposed in the aspiration lumen, but alleges that Schwager teaches a main shaft including a distal shaft (8) and a proximal shaft, (3) wherein an aspiration lumen (4) for removing the substance by aspiration is disposed in the distal shaft and the proximal shaft; a detachable core wire (70) disposed in the aspiration lumen: wherein the relationship $0.4 < R1/R2 < 0.7$ is satisfied.

The Office Action further alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the wire diameter the proper size, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art.

The Office Action still further alleges that Noriega et al. teaches a detachable core wire (22) disposed in the aspiration lumen.

Regarding the alleged "detachable core wire" (70) of Schwager, it is respectfully submitted that Schwager teaches that, although the wire can be displaced therein and removable therefrom the lumen, it is frictionally mounted withing lumen (4). In order to be frictionally mounted, the wire (70) would need to be in contact with elongated shaft (1), as shown in FIG. 4.

Therefore, one might experiment to discover the optimum or working ranges of the wire (70), however, the optimum or working ranges must be such that wire (70) would still be in contact with the elongated shaft (1) as taught by Schwager. Otherwise the teachings of Schwager would not be followed.

Applicants respectfully submit that a wire having the claimed relative dimensions, that is a dimension which clearly does not provide for the wire contacting the inner diameter of the aspiration lumen, is not taught or suggested by Schwager.

Further, in regard to Schwager, the detachable core wire corresponds to frictionally extending within the lumen. Accordingly the limitation of the present invention, i.e., $0.4 \leq R1/R2 \leq 0.7$, is not met because it seems to be $0.7 < R1/R2$.

Regarding Noriega et al., it is respectfully submitted that Noriega et al. is concerned with a hollow guidewire (14) for a drive shaft (22). The driveshaft (22) rotates within the hollow guidewire(14), as shown in FIG. 3A. The driveshaft (22) has a distal tip of various configurations which acts on materials within a blood vessel. The Office Action alleges that the driveshaft (22) corresponds to the presently claimed detachable core wire (101).

Noriega et al. teaches how to fabricate a hollow guidewire (14) for supporting a driveshaft (22) which, during use, rotates within the hollow guidewire. The relative diameters of the driveshaft and hollow guidewire are in consideration of such rotation, as opposed to in the present invention in which the relative diameters are in consideration of inserting the main shaft having the aspiration lumen into a blood vessel, with the aid of the detachable core wire disposed therein. It is discussed in Noriega et al. at paragraph [0079] that: "The elongate member (14) is preferably a flexible, hollow guidewire that has the flexibility, pushability and torqueability to allow a user to advance the hollow guidewire directly through a tortuous blood vessel to the target site. Because of the high columnar strength of the hollow guidewire (14) there is typically no need for a separate guidewire to advance the hollow guidewire 14 to the lesion at the target site."

Therefore, Noriega et al. makes no claim that alleged "detachable core wire", driveshaft (22), is for facilitating the insertion of the hollow guidewire (14) into a blood vessel.

Therefore, it is respectfully submitted that Noriega et al. can not be relied on for teaching the relative diameters of the present invention because, although it is in the same art, the purpose of the present claimed detachable core wire and driveshaft of Noriega et al. are entirely different.

Further, in regard to Noriega et al., a relationship between an inner diameter of a hollow guide wire and an outer diameter of a drive shaft is set based on a rotating drive shaft, i.e., it is different from the present invention. Paragraph [0079] of Noriega reads as follows:

...Because of the high columnar strength of the follow guide wire 14, there is typically no need for a separate guide wire to advance the hollow guide wire 14 to the lesion at the target site,...

Accordingly, in Noriega, it is not obvious to set a ration of R1/R2 of a core wire used to provide good operability. Based on the description in paragraph [0123] of Noriega, it is not clear to be aspirated by a hollow guide wire 14.

In view of the amendment to Claim 1, and the above remarks, removal of this rejection is respectfully requested.

In the Final Office Action, Claim 18 is rejected under 35 U.S.C. §103(a) as being unpatentable over Douk and Noriega et al. in view of Ha et al. (U.S. Patent No. 6,159,195). Reconsideration and removal of this rejection are respectfully requested in view of the following remarks.

Claim 18 depends from Claim 1, which is discussed above.

In view of the amendment to Claim 1, and the above remarks, removal of this rejection is respectfully requested.

In view of the aforementioned remarks, Claims 1-4 and 7-20 are believed to be patentable

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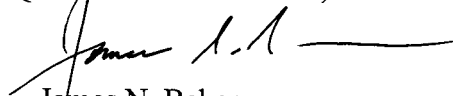
and in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Petition for Extension of Time
RCE Transmittal